



pondmussel

Ligumia subrostrata

Kingdom: Animalia
Division/Phylum: Mollusca
Class: Bivalvia

Features

The shell of the pondmussel is relatively small, thin, elongate, and compressed. The anterior end is rounded. The posterior end is pointed in males and saber-shaped in females. The dorsal and ventral margins are straight. Six to eight wavy ridges may extend from the umbo (hump near the hinge), but often are not visible. The outside of the shell is smooth and dull. It is greenish yellow, turning darker brown to black in older shells. The inside of the shell is white and highly iridescent toward the posterior end. The pondmussel may reach lengths up to three inches.

Natural History

The pondmussel is found in small creeks and ponds in mud or sand. Its distribution in Iowa isn't well known since almost no surveys have been done in standing water bodies. Freshwater mussels have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the

female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

constructed lakes, ponds, and reservoirs; interior rivers and streams

Iowa Status

common; native

Iowa Range

occurs from the northwest to the southeast corners of the state

Bibliography

Iowa Department of Natural Resources. 2001.
Biodiversity of Iowa: Aquatic Habitats CD-ROM.